

AGROFORESTRY IN THE NIJMEGEN-AREA; VISIONING, SHARING, DESIGNING

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Abstract

In the area of Nijmegen, the Netherlands, a two-year project has started in 2018 to investigate the potential for agroforestry in the area, up to 1,000 ha. To assist policy makers and planners, the research will investigate opinions and visions of stakeholders in the area. The first step in this process is an investigation based on the RRA methodology. This will provide a starting for further research for and by design, which will be rooted in the principles of responsible innovation.

Keywords: agroforestry; RRA; responsible innovation; landscape design

Dreaming

In the area of Nijmegen, Van Hall Larenstein started a two-year project in January 2018 to investigate opportunities for a large area of agroforestry. As the project recently started, there are still many questions to answer, some deal with the technical aspects and some with the economic aspects. Other aspects that are very important in this project are the design of agroforestry and the vision on the landscape around Nijmegen. The project intends to aid in the development of a vision for future development in the area between the cities of Arnhem-Nijmegen.

This provides a unique opportunity to design, to dream, to speculate about in all their appearances. This could mean a system of alleycropping with multiple woody crops, but it could also mean a variation of a so called foodforest, a multiple cropping system originating from the permaculture movement.

The starting point of the dream could be “what if...”.

What if we plan an area of 1,000 ha of agroforestry in the region? What if we made this into one big forested area or what if we split the 1,000 ha into smaller plots because many people will participate with a small plot of land? How can we make this economically viable? What if students would design this? What if, in the end there would be a vision welcomed by all who are living, working and recreating in the area?

Big dreams? Maybe. But, quoting Christopher Reeve “*At first, dreams seem impossible, then improbable, and eventually inevitable*”. However, at some point dreams have to turn into action, projects have to start and research has to be done. So, how to proceed the coming two years? The project intends to integrate landscape design with knowledge on agroforestry but also doesn't want to overlook the socio-economical aspects. Therefore the landscape or landscapes which will be explored during the project, will be accompanied by an inventory of the potential of agroforestry in the area. This inventory will be rooted in the principles of responsible innovation. The four aspects these authors distinguish (anticipation, reflexivity, inclusion, responsiveness) provide a framework on which the research can be build (Stilgoe et al. 2013). It gives an opening for involving people living in a specific area but the framework also addresses the governance and even the role of the researchers themselves.

The project

As this project deals with the question whether there is a place for agroforestry/foodforest, and therefore with the land use, there is a connection with the body of literature on communication for rural development by authors such as Leeuwis and Aarts (2011) and Servaes and Lie (2014). These authors write about communication for sustainable development, communication and innovation processes and complex systems. Agroforestry in the area of Nijmegen, is, if only by its geographical size, a complex issue. It is an area which is, just as all other areas in the Netherlands, in use. It is owned, it is farmed, people live there, work, travel through and recreate in the area. Therefore, they have an opinion about the area. That leads to questions such as 'who are involved', 'who will benefit and who will lose something if the area will change', 'what will be the benefits and the losses' etc. etc.

But, what, then, is the link with landscape design? At this moment, the challenge for landscape design in the Netherlands, is not making the design itself. The challenge is the current focus on coalition-forming, working with participants and stakeholders in a certain area. (Van Dooren 2018). This makes the designer, with his or her knowledge of design but with less knowledge of the area, part of the discussion

So, what is the role of landscape design in questions of regional food production? This is firstly a philosophical question that has to be answered by landscapes designers individually. Secondly, it is a very practical question about methodology and organization (Figure 1). Van den Goorbergh (2014) makes an argument for the social-spatial analysis of how public spaces are used and Van der Linde (2014), who illustrates the use of Rapid Rural Appraisal as a strategy for landscape design. Including social aspects and using the RRA methodology which has its roots firmly in international rural development practices. This opens up the possibility for a landscape design, but also a research based on participative design. Using not only interviewing, but also other forms of recording, such as filmmaking, stakeholders are invited to express their voice differently and often more freely than during the large meetings that are often used in spatial planning processes (Cumming and Norwood 2012).

This will also allow for the answer to questions along the lines of who will use and maintain a food forest. If it is going to be a commercial forest, then the answer will be clearer than when social and recreational functions will be part of the final ideas. This is also a learning trajectory for all those involved. This will touch upon the terminology of socio-ecological learning and public learning. This in turn relates back to the questions of anticipation, inclusiveness, responsiveness and reflexivity (Stilgoe et al. 2013) and how to organize this process.

The role of the designer and the individual choices he or she has to make is also recognized in the model of Stilgoe et al. (2013): the emphasis they put on reflexivity is an important one, as they state that in responsible innovation, reflexivity on part of actors and institutions means not only thinking about their role and their responsibilities, but also acting upon it.



Figure 1: How to reconcile all wishes and needs when planning agroforestry in a region?

The work in progress

When you go back to the big dream again, and think of participative design, what if people involved are given the possibility to dream with us, are challenged to design with us? What if they are given a drawing pencil as well? And what if together we can draw a landscape in which agroforestry is firmly rooted?

The big question in this project is how the area could look if a substantial part of it would be agroforestry. The other question that will be answered is how organize research for design in the context of agroforestry.

The first steps of the research have been made already by doing desk research. This of course, does not bring the researchers any closer to the stakeholders in the area. That is why there will be a first start with a rapid rural appraisal (RRA). This form of social research has been used since the late 1970s and allows the researchers (master students in this specific case) to get into contact with people in the area and to have a conversation or interview about the topic. The quick and dirty approach doesn't allow for extended in-depth interviews, but has in the past provided a valuable methodology to extract information from an area or group of people (Chambers 1992). As Cumming & Norwood (2012) experienced, talking with people about the area they live and work in, an inclusive dialogue is vital to address land use issues. That is why we intend to expand on the knowledge from the RRA by organizing other activities in which we would like invite people to actually pick up a pencil and draw.

Results

The results from the RRA-project will fall into several categories: at first there are the actual results of the interviews and other methods that are used during the fieldwork. These will give us a first insight in the perceptions and interests of the stakeholders and provide the basis for more targeted and in-depth research and participatory activities. It will also help us to identify the correct stakeholders, not only as a group or organization but also the individuals who are important. The second category of results will be less tangible, but will hopefully serve as a second layer on which to continue the future work: here we are talking about the awareness of agroforestry and the options it may mean as a farming model for farmers and other land-owners or user as a viable business alternative.

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